# This Page Is Inserted by IFW Operations and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently amended) A missile launcher for accepting a canisterized missile, which missile canister defines a missile launch end and a missile exhaust end, for, prior to missile launch, holding said missile canister in a generally vertical launch position below a deck, said missile launcher comprising:

at least one elongated round exhaust gas chimney;

a support structure defining a generally axial cavity defining a missile launch end and a missile exhaust end, said cavity of said support structure having length and cross-sectional dimensions sufficient to accommodate said missile canister, said at least one elongated <u>round</u> exhaust gas chimney lying along the exterior of said support structure and extending, parallel with said axis of said cavity, from near said missile launch end to near said missile exhaust end;

a missile exhaust plenum attached near said missile exhaust end of said support structure, said missile exhaust plenum being coupled to said at least one elongated round exhaust gas chimney near said missile exhaust end of said support structure, said missile exhaust plenum further including attachment means for attachment to said missile exhaust end of said missile canister, for routing missile exhaust gas from said missile exhaust end of said support structure to said at least one elongated round exhaust gas chimney, for causing missile exhaust gas to vent from said at least one elongated round exhaust gas chimney near said missile launch end of said support structure; and

a door structure attached to said missile launch end of said missile launch structure, for, when closed, protecting at least said support structure, said at least one elongated <u>round</u> exhaust gas chimney, and any missile canister accommodated within said cavity, and for, when open, providing clearance for launch of said missile, and for venting of said exhaust gas from said at least one elongated <u>round</u> exhaust gas chimney.

Application No. 09/892,839 Response dated December 5, 2003 Reply to Office Action mailed September 30, 2003

- 2. (Previously presented) The missile launcher according to claim 1, wherein said cavity has a rectangular cross-section.
- 3. (Previously presented) The missile launcher according to claim 2, wherein said rectangular cavity has a square cross-section.
  - 4. (Canceled)
  - 5. (Canceled)
- 6. (Currently Amended) The missile launcher according to claim 1, wherein said at least one elongated <u>round</u> exhaust gas chimney is two elongated <u>round</u> exhaust gas chimneys.
- 7. (Currently Amended) An array of missile launchers, each of said missile launchers of said array being adapted for accepting a canisterized missile, which missile canister defines a missile launch end and a missile exhaust end, each of said missile launchers being for, prior to missile launch, holding said missile canister in a generally vertical launch position below a deck, each of said missile launchers comprising:

at least one elongated <u>round</u> exhaust gas chimney;

a support structure defining a generally axial cavity defining a missile launch end and a missile exhaust end, said cavity of said support structure having length and cross-sectional dimensions sufficient to accommodate said missile canister, said at least one elongated <u>round</u> exhaust gas chimney lying adjacent the exterior of said support structure and extending, parallel with said axis of said cavity, from near said missile launch end to near said missile exhaust end;

a missile exhaust plenum attached to said support structure near said missile exhaust end of said support structure, said missile exhaust plenum being coupled to said at least one elongated <u>round</u> exhaust gas chimney near said missile exhaust end of said support structure, said missile exhaust plenum further including attachment means for attachment to said

missile exhaust end of said missile canister, for routing missile exhaust gas from said missile exhaust end of said support structure to said at least one elongated <u>round</u> exhaust gas chimney, for causing missile exhaust gas to vent from said at least one elongated <u>round</u> exhaust gas chimney near said missile launch end of said support structure;

a door structure attached to said missile launch end of said missile launch structure, for, when closed, protecting at least said support structure, said at least one elongated round exhaust gas chimney, and any missile canister accommodated within said cavity, and for, when open, allowing egress of said missile and venting of said exhaust gas from said at least one elongated round exhaust gas chimney; and

said array further comprising an attachment means coupled to each of said missile launchers of said array, for attaching said missile launchers to each other to form said array, and for attaching said array to an underlying structure.

8. (Currently Amended) A missile launcher for accepting a missile canister, which missile canister defines a missile launch end and a missile exhaust end, for, prior to missile launch, holding said missile canister in a generally vertical launch position below a deck, said missile launcher comprising:

at least one elongated round exhaust gas chimney;

a lattice support structure defining a generally axial cavity defining a missile launch end and a missile exhaust end, said cavity of said lattice support structure having length and cross-sectional dimensions sufficient to accommodate said missile canister, said at least one elongated <u>round</u> exhaust gas chimney lying adjacent the exterior of said support structure and extending from near said missile launch end to near said missile exhaust end of said support structure;

a missile exhaust plenum attached near said missile exhaust end of said support structure, said missile exhaust plenum being coupled to said at least one elongated <u>round</u> exhaust gas chimney near said missile exhaust end of said support structure, said missile exhaust plenum further including attachment means for attachment to said missile exhaust end of said missile canister, for routing missile exhaust gas from said missile exhaust end of said support structure to said at least one elongated <u>round</u> exhaust gas chimney, for thereby causing missile

Application No. 09/892,839 Response dated December 5, 2003 Reply to Office Action mailed September 30, 2003

exhaust gas to vent from said at least one elongated <u>round</u> exhaust gas chimney near said missile launch end of said support structure; and

a door structure attached to said missile launch end of said missile launch structure, for, when closed, protecting at least said lattice support structure, said at least one elongated <u>round</u> exhaust gas chimney, and any missile canister accommodated within said cavity, and for, when open, providing clearance for launch of that missile accommodated within a canister within said cavity, and for allowing egress of said exhaust gas from said at least one elongated <u>round</u> exhaust gas chimney.

- 9. (Previously presented) The missile launcher according to claim 8, wherein the cross-section of said cavity is generally rectangular in cross-section.
- 10. (Previously presented) The missile launcher according to claim 9, wherein said cavity is generally square in cross-section.
  - 11. (Canceled)
  - 12. (Canceled)
  - 13. (Canceled)
  - 14. (Canceled)
- 15. (Currently Amended) The missile launcher according to claim 8, wherein said at least one elongated <u>round</u> exhaust gas chimney comprises two mutually parallel exhaust chimneys of substantially equal length.
- 16. (Currently Amended) An array of missile launchers for accommodating and protecting a plurality of missile canisters, each of which missile canisters may include one or more missiles, and each of which missile canisters defines a missile launch end and a missile exhaust end, for, in use, accommodating said missile canisters in a generally

Application No. 09/892,839

Response dated December 5, 2003

Reply to Office Action mailed September 30, 2003

vertical launch position below a deck, said array of missile launchers including a battery including a plurality of individual missile launchers, each of said individual missile launchers including:

at least one elongated <u>round</u> exhaust gas chimney;

a lattice support structure defining a generally axial cavity defining a missile launch end and a missile exhaust end, said cavity of said lattice support structure having length and cross-sectional dimensions sufficient to accommodate one of said missile canisters, said at least one elongated <u>round</u> exhaust gas chimney being adjacent the exterior of said support structure, and extending from near said missile launch end to near said missile exhaust end of said support structure;

a missile exhaust plenum attached to said support structure near said missile exhaust end of said support structure, said missile exhaust plenum being coupled to said at least one elongated <u>round</u> exhaust gas chimney near said missile exhaust end of said support structure, said missile exhaust plenum further including attachment means for attachment to said missile exhaust end of said missile canister, for routing missile exhaust gas from said missile exhaust end of said support structure to said at least one elongated <u>round</u> exhaust gas chimney, for causing missile exhaust gas to vent from said at least one elongated <u>round</u> exhaust gas chimney near said missile launch end of said support structure; and

a door structure attached to said missile launch end of said missile launch structure, for, when closed, protecting at least said support structure, said at least one elongated <u>round</u> exhaust gas chimney, and any missile canister accommodated within said cavity, and for, when open, allowing egress of said missile from said missile canister and said exhaust gas from said at least one elongated <u>round</u> exhaust gas chimney.

- 17. (Canceled)
- 18. (Canceled)
- 19. (Canceled)
- 20. (Canceled)

Application No. 09/892,839 Response dated December 5, 2003 Reply to Office Action mailed September 30, 2003

- 21. (Canceled)
- 22. (Canceled)
- 23. (Canceled)